

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An electro-luminescence display device comprising:

R, G and B cells having different light-emission efficiencies, wherein each of the R, G and B cells has a cathode electrode, an anode electrode and an emitting layer interposed between the cathode electrode and the anode electrode;

a timing controller for generating a gate control signal and a data control signal, wherein the timing controller includes a R look-up table which receives Red, ~~Green and Blue~~ N-bit digital data signals ~~having a same number of gray scale values~~, and converts the Red, ~~Green and Blue~~ N-bit digital data signals into Red, ~~Green and Blue~~ M-bit digital data signals, a G look-up table which receives Green N-bit digital data signals and converts the Green N-bit digital data signals into Green M-bit digital data signals, and a B look-up table which receives Blue N-bit digital data signals and converts the Blue N-bit digital data signals into Blue M-bit digital data signals respectively, wherein each of N and M is an integer, M is greater than N, and numbers of gray scale values of the Red, Green, and Blue N-bit digital data signals are the same, and wherein a number of gray scale values of the Red M-bit digital data signals is larger than that of the Green M-bit digital data signals, and a number of gray scale values of the Green M-bit digital data signals is larger than that of the Blue M-bit digital data signals ~~at least two of the Red, Green and Blue M-bit digital data signals are different from each other~~;

a gamma voltage generator having a single resistor string in which a plurality of resistors are serially connected, which receives all of the Red, Green and Blue M-bit digital data signals and generates a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals; and

a data driving circuit which generates Red, Green and Blue analog data signals corresponding to the plurality of gamma voltages responding to the data control signal, and supplies the Red, Green and Blue analog data signals to respective Red, Green and Blue pixels.

2-6. (Canceled).

7. (Previously Presented) The electro-luminescence display device according to claim 1, wherein the Red analog video signal applied to the respective pixel has a voltage level ranged in 0V to 5V.

8. (Previously Presented) The electro-luminescence display device according to claim 7, wherein the Green analog data signal applied to the respective pixel has a voltage level ranged in 0V to 2.5V.

9. (Previously Presented) The electro-luminescence display device according to claim 7, wherein the Blue analog data signal applied to the respective pixel has a voltage level ranged in 0V to 1.9V.

10. (Previously Presented) The electro-luminescence display device according to claim 1, wherein each of the pixels is an electro-luminescence cell.

11. (Currently Amended) A method of driving an electro-luminescence display device including R, G and B and cells having different light-emission efficiencies, the method comprising:

receiving Red, Green and Blue N-bit digital data signals ~~having a same gray scale value;~~

converting the Red, Green and Blue N-bit digital data signal into Red, Green and Blue M-bit digital data signals, respectively, wherein each of N and M is an integer, M is greater than N, ~~and numbers of gray scale values of at least two of the Red, Green and Blue M-bit digital data signals are different from each other;~~

generating a plurality of gamma voltages corresponding to the Red, Green and Blue M-bit digital data signals by a gamma voltage generator having a single resistor string in which a plurality of resistors are serially connected, which receives all of the Red, Green and Blue M-bit digital data signals;

generating Red, Green and Blue analog data signals corresponding to the plurality of

gamma voltages; and

applying the Red, Green and Blue analog data signals to respective Red, Green and Blue pixels, wherein each of Red, Green and Blue pixels includes a cell which has a cathode electrode, an anode electrode and an emitting layer disposed between the cathode electrode and the anode electrode,

wherein number of the gray scale values of the Red, Green and Blue N-bit digital data signals are the same, a number of gray scale values of the Red M-bit digital data signals is larger than that of the Green M-bit digital data signals, and a number of gray scale values of the Green M-bit digital data signals is larger than that of the Blue M-bit digital data signals.

12-15. (Canceled).

16. (Previously Presented) The method according to claim 11, wherein the Red analog data signal applied to the respective pixel has a voltage level ranged in 0V to 5V.

17. (Previously Presented) The method according to claim 11, wherein the Green analog data signal applied to the respective pixel has a voltage level ranged in 0V to 2.5V.

18. (Previously Presented) The method according to claim 11, wherein the Blue analog data signal applied to the respective pixel has a voltage level ranged in 0V to 1.9V.

19. (Original) The method according to claim 11, wherein each of the pixels is an electro-luminescence cell.

20-28. (Canceled).